

TAXONOMIC NOTES ON *EUSAPYGA* (HYMENOPTERA: SAPYGIDAE) AND DESCRIPTION OF *EUSAPYGA NORDENAE* N. SP.¹

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ABSTRACT: Variation is reported in the number of ocellar calli in *Eusapyga* and linear tyloids are noted ventrally on the terminal flagellomeres of males. *Eusapyga nordenae*, n. sp., is described from south central Florida sand scrub.

Cresson (1880) described *Eusapyga* as a new subgenus in a brief key to the species of *Sapyga* Latreille. He based it on the presence of six smooth, raised areas on the vertex, small indistinct ocelli, a raised line along the upper inner eye orbits and the similarly shaped terminal antennal segment in both sexes compared with a lack of calli and sexual dimorphism of the last antennal segment in *Sapyga*. Pate (1947) confirmed these differences in his tentative reclassification of the New World Sapygidae but noted in his key to the genera of Sapyginae that *Eusapyga* had four³ impunctate calli in the ocellar area. In his key to the Nearctic and Palearctic genera of Sapygidae Kurzenko (1997) confirmed Cresson's criteria for separation of *Eusapyga*. His figure 15 shows six rounded calli in the ocellar area, small ocelli and a narrow callus along the upper inner eye orbits.

The rounded calli (Fig. 4) in and around the ocellar triangle consist of a larger pair between and extending posterad of the posterior ocelli, a smaller lateral pair each beneath and mostly laterad of the small posterior ocelli and a small pair each almost touching the lower side of the small anterior ocellus. There is, however, intraspecific variation in the development of the two smaller pairs of ocellar calli. Both pairs may be absent (Figs. 1, 3) or the lower pair may be absent and the lateral pair present but smaller (Fig. 2). The narrow callus along the upper inner eye orbits is shaped like an elongate teardrop (Figs. 5, 6); it is not known to vary intraspecifically.

The apical 8-10 flagellomeres of *Eusapyga* males each have a linear tyloid on the ventral surface, a character not noted in the genus previously.

¹ Received August 17, 1998. Accepted September 23, 1998.

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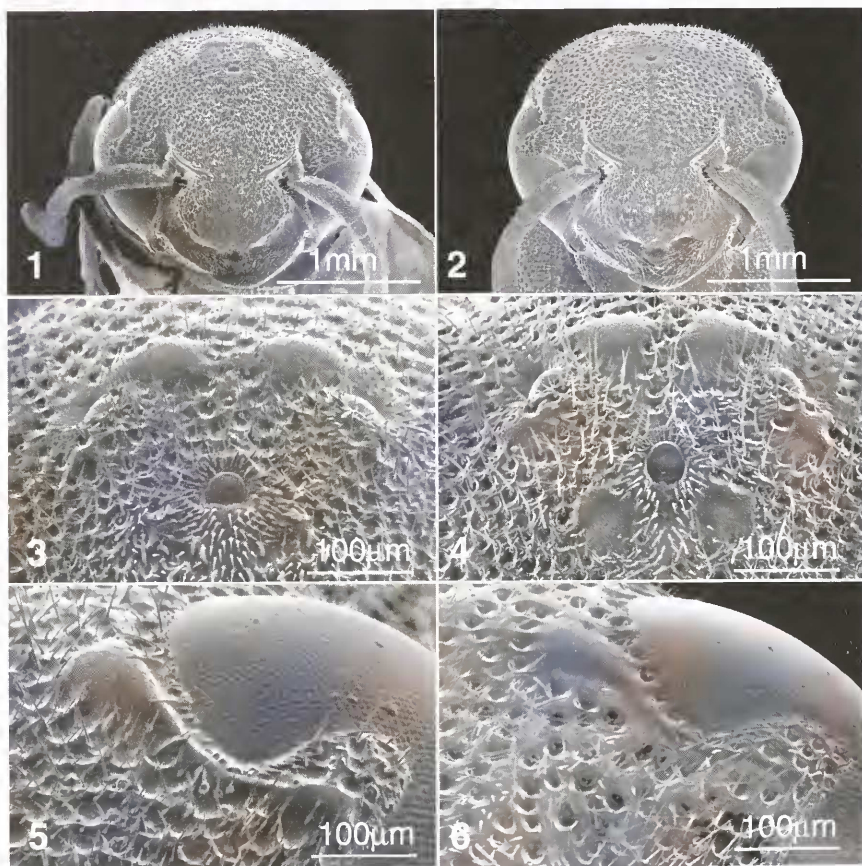
³ This is either a *lapsus* or Pate may have based his key on an aberrant specimen lacking a pair of calli.

Eusapyga nordenae Krombein, NEW SPECIES

(Figures 1, 3, 5)

Female Description. Length 11.3 mm, forewing 8.0 mm. Head in frontal view rounded (Fig. 1); lateral angles of median clypeal lobe obtuse; ocellar area (Fig. 3) with a pair of large, rounded posterior calli, lateral and anterior pairs of calli lacking; tear-drop shaped callus along upper inner eye margin (Fig. 5) more strongly raised than in other species (cf Fig. 6).

Black, pale markings red to orange; scape, pedicel and first flagellomere light red; clypeus with a pair of small red spots laterally; front above clypeus with anchor-shaped, reddish orange spot, narrow orange stripe along inner eye margin and small red streak along upper outer eye



Figs. 1-6, *Eusapyga* females. 1. *E. nordenae* n. sp., head in frontal view. 2. *E. rubripes* (Cresson), head in frontal view, Dallas, TX. 3. *E. nordenae*, ocellar area. 4. *E. verticalis* (Cresson), ocellar area, Mt. Shasta City, CA. 5. *E. nordenae*, ocular callus. 6. *E. rubripes*, ocular callus.

margin; pronotum dorsally with narrow orange stripe anteriorly, rest of dorsum light red; scutum with a posterolateral spot darker red; scutellum and metanotum each with a pair of lateral orange spots, more narrowly separated on metanotum; upper mesopleuron with a small orange spot beneath wings; propodeum with a pair of large, light red spots posteriorly extending onto lateral surface; legs light red except coxae in part black; wings strongly infuscated, costal lamella and base of costa orange, stigma light brown; first metasomal segment dorsally with an anterior light red band shading to orange laterally; second dorsal segment with a broad light red band shading to orange posteriorly; fourth dorsal segment with a pair of narrow subapical orange stripes narrowly separated near midline; second ventral segment with large posterolateral spots light red; third ventral segment with a short posterolateral red stripe, and fourth with a small posterolateral red spot.

Male. Unknown.

Holotype. Female; FLORIDA, Highlands Co., Archbold Biol. Station, 27° 10'N, 81° 21'W, 8 April 1998, B.B. Norden, on flowers of *Ilex glabra*. Deposited in National Museum of Natural History (USNM).

Host. Unknown, but it is possibly the megachilid bee *Dianthidium floridiense* Schwarz, several females of which were collected on flowers of *Ilex glabra* on the same date. Bees of this genus are the only recorded hosts of *Eusapyga* and they have been reported as hosts for four other taxa in the genus (Krombein, 1979).

Etymology. The species is named for its collector, Beth B. Norden, a specialist in pollination ecology.

Diagnosis. *Eusapyga nordenae* is distinguished from its congeners by a combination of the infuscated wings and in having the pale markings ranging from light red to orange. Other species of *Eusapyga* are slightly infumated on the anterior third of the forewings and the pale markings are bright yellow to white except *E. rubripes* which has light red legs with some bright yellow markings rather than black legs with bright yellow or black areas.

ACKNOWLEDGMENTS

I am grateful to Donald Azuma, Academy of Natural Sciences, Philadelphia, for the loan of type and non-type specimens of *E. rubripes* (Cresson), and to Philip Perkins, Museum of Comparative Zoology, Cambridge for the loan of the type of *E. carolina* Banks. Within the Smithsonian I am indebted to Beth Norden for mounting specimens for uncoated SEM study, Susann Braden for preparation of the micrographs and George Venable for preparation of the figures.

Finally, I thank two anonymous reviewers for their thoughtful and helpful comments.

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